[illegible] -187

[illegible] Judge Davis

Reversed — Justice Clifford

& Wall

TRANSCRIPT OF RECORD.

SUPREME COURT OF THE UNITED STATES.

No. ~~446.~~ 230

JAMES REES, PLAINTIFF IN ERROR,

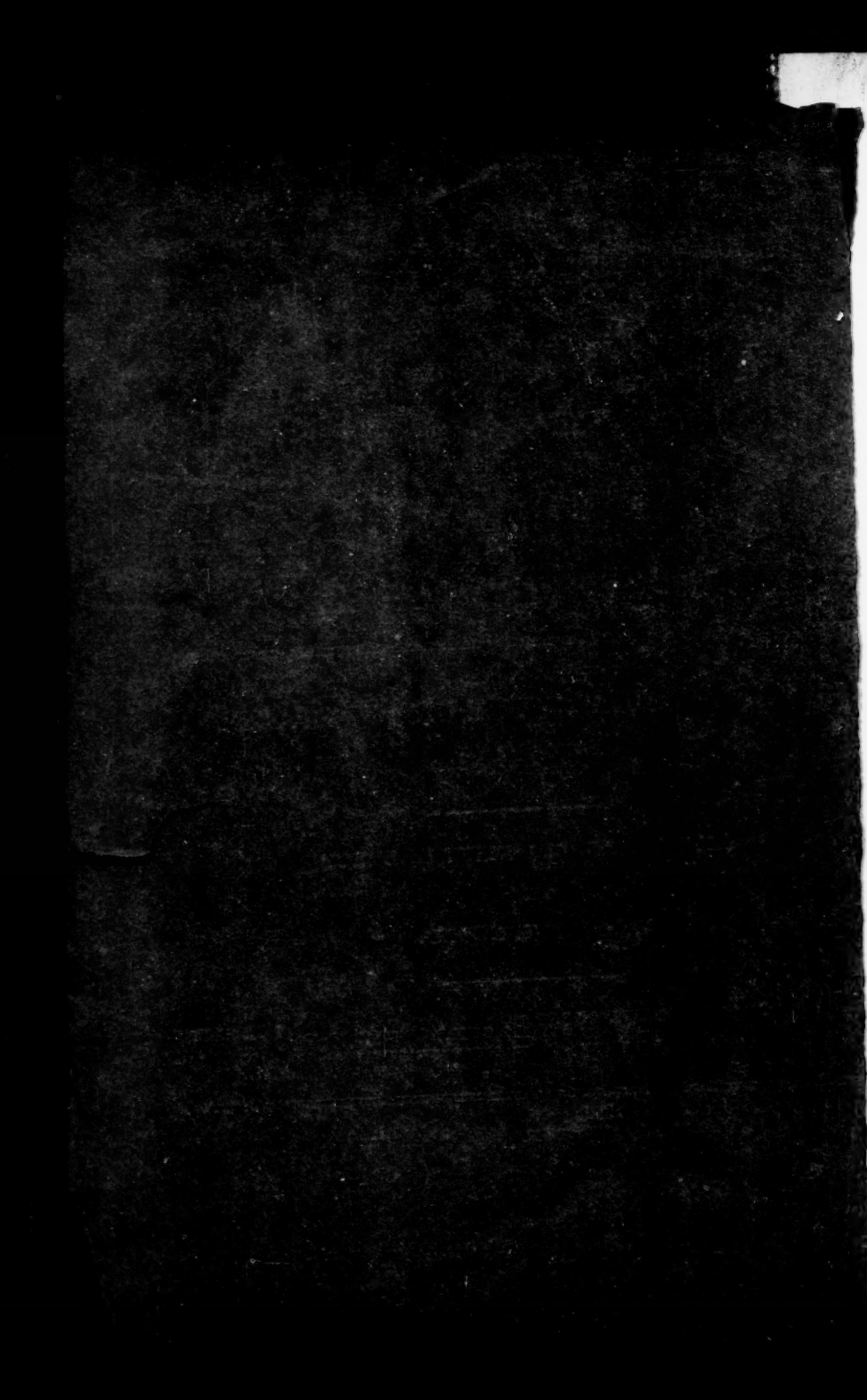
vs.

WILLIAM L. GOULD.

IN ERROR TO THE CIRCUIT COURT OF THE UNITED STATES FOR THE WESTERN DISTRICT OF PENNSYLVANIA.

FILED DECEMBER 24, 1870.

Dec 1871



SUPREME COURT OF THE UNITED STATES.

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JAMES REES, PLAINTIFF IN ERROR,

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IN ERROR TO THE CIRCUIT COURT OF THE UNITED STATES FOR THE WESTERN DISTRICT OF PENNSYLVANIA.

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1 Among the rolls, records, and proceedings of the circuit court of the United States for the western district of Pennsylvania may be found the following words and figures, to wit:

WILLIAM L. GOULD
vs.
JAMES REES. } No. 113. November term, 1866.

1½ In circuit court of U. S. for the western district of Penn'a.

WILLIAM L. GOLD
vs.
JAMES REES.

Issue summons case to 1st Monday of October, 1866.

S. H. GEYER,
Att'y for Pl'ff.

(Indorsed:) No. 113. Nov. T., 1866. William L. Gold vs. James Rees. Precipe for summons. Filed August 27th, 1866. S. H. Geyer.

2 UNITED STATES,
Western District of Pennsylvania, set:

[SEAL.] The President of the United States to the marshal of the western district of Pennsylvania, greeting:

We command you, that you summon James Rees, late of your district, if he may be found therein, so that he be and appear before the judges of the circuit court of the United States in and for the western district of Pennsylvania, in the third circuit, at a session of the same court, to be holden at Pittsburgh, on the first Monday of October next, to answer to William S. Gold in an action on the case, and have you then and there this writ.

Witness the Honorable Salmon P. Chase, Chief Justice of the Supreme Court of the United States at Pittsburgh, this 27th day of August, A. D. 1866, and in the 91st year of the independence of the said United States.

H. SPROUL, *Clerk.*

[50-cent stamp.]

(Indorsed:) No. 113. Nov. term, 1866. W'm L. Gold vs. James Rees. Summons.

Served personally & by copy on the above-named defendant, James Rees, August 28th, 1866.

Fees, (marshal,) $2 50.

THO'S A. ROWLEY,
Dep'y Marshal.

GEYER.

3 UNITED STATES OF AMERICA,
Western District of Penn'a, set:

In the circuit court of the United States in and for said district, of November term, 1866. No. 113.

James Rees, a citizen of said western district of Pennsylvania, was

summoned to answer W'm L. Gold, a citizen of the United States and of said district, of a plea of trespass, on the case, &c., whereupon the said plaintiff, by Stephen H. Geyer, esq'r, [his] attorney, complains that the said plaintiff, before and at the time of the making of the letters-patent, and of the committing of the grievances by the said defendant hereinafter mentioned, was the true and first inventor of a certain "improvement in steam-engines," to wit, a new and improved mode of operating and handling steam-engines, the nature of which invention consists in so arranging and constructing the cranks or arms of the lifters and cam-rods of popped-valve engines that they may be operated and handled with ease and speed by means of levers and connecting rods, &c., to wit, at the district aforesaid; and thereupon the United States of America, to wit, on the 24th day of January, 1860, at the district aforesaid, by its letters-patent bearing date the said 24th
4 day of January, 1860, under the seal of the Patent Office, signed by the Secretary of the Interior and countersigned by the Commissioner of Patents, and then and there delivered by the said United States to the said plaintiff; which letters-patent, with the specifications and schedules thereunto annexed, signed, countersigned, and sealed as aforesaid, the said plaintiff now produces in court here, the date whereof is the day and year aforesaid, did grant, according to law, to the said plaintiff, his heirs, administrators, or assigns, for the term of fourteen years, from the said 24th day of January, one thousand eight hundred and sixty, the full and exclusive right and liberty of making, constructing, using, and vending to others to be used, the said improvement, a description whereof is given in the schedule to the said letters-patent annexed and made a part thereof, as by the said letters-patent and the annexed specification or schedule thereto annexed and now produced in court here, will, among other things, more fully and at large appear.

And the said plaintiff further says that, from the time of the making and delivery of the said letters-patent until the present, he has
5 always, by himself and his servants, made, used, and exercised the said improvement, so as aforesaid invented by him, to his great advantage and profit, to wit, at the district aforesaid. Yet the said defendant, well knowing the premises, but contriving and wrongfully and injuriously intending to injure the said plaintiff, and to deprive him of the profits, benefits, and advantages which he might and otherwise would have derived and acquired from the making, using, exercising, and vending of the said improvement, after the making and delivery of the said letters-patent as aforesaid, and within the said term of years in the said letters-patent mentioned, to wit, on the first day of May, 1862, and at divers other times, both before that time and between that time and the commencement of this suit, and within the district aforesaid, unlawfully and unjustly, without the leave or license, and against the will of the said plaintiff, made, used, sold, and delivered to be used by others divers, to wit, one thousand machines, in imitation of, and corresponding with, the said improvement of the said plaintiff as aforesaid, in breach of the said letters-patent, and against the privilege so granted to the said plaintiff, his heirs, administrators, or assigns, as aforesaid, whereby the said plaintiff has been and is greatly in-
6 jured, and has been and is deprived of a great part of the profits and advantages which he might and otherwise would have derived and acquired from the said improvement, to wit, at the district aforesaid, wherefor the said plaintiff saith that he is injured and hath sustained damage to the amount of twenty thousand dollars; and therefore he brings suit, &c.

S. H. GEYER, *Pl'ff's Attorney.*

(Indorsed:) No. 113. Nov. T., 1866. W'm L. Gould vs. James Rees. Narr. Filed June 18, 1867. S. H. Geyer.

7 UNITED STATES OF AMERICA,
Western District of Pennsylvania, ss:

In the circuit court of the United States in and for said district.

WILLIAM L. GOLD
vs.
JAMES REES. } No. 113. Of November term, 1866.

Additional count filed by leave of court.

And the said plaintiff, by leave of the court for that purpose first had and obtained, further says that he, the said plaintiff, before and at the time of the making of the letters-patent and of the committing of the several grievances by the said defendant hereinafter mentioned, was the true and first inventor of a certain improvement in steam-engines, to wit, a new and improved mode of operating and handling steam-engines, the nature of which invention consists in so arranging and constructing the cranks or arms of the lifters and cam-rods of popped-valve engines, that they may be operated and *hauled* [handled] with ease and speed by means of levers and connecting rods, &c., to wit, at the district aforesaid, and before the issuing of the letters-patent and whilst he, the said plaintiff, was engaged in making experiments for the purpose of perfecting the same preparatory to his applying for said letters-patent therefore,
8 to wit, on the 2nd day of March, 1859, he duly filed in the office of the Commissioner of Patents in the city of Washington a description of his said invention as a caveat agreeably to the provisions of the act of Congress in that case made and provided, and afterwards, to wit, on the 24th of January, 1860, the said United States of America, at the district aforesaid, by its letters-patent, bearing date that day, under the seal of the Patent Office, signed by the Secretary of the Interior and countersigned by the Commissioner of Patents, and then and there delivered by the United States, to the said plaintiff, which said letters-patent, signed, countersigned and sealed as aforesaid, with the specification or schedule thereunto annexed, the said plaintiff now produces in court here, the date whereof is the day and year aforesaid, did grant according to law to him, the said plaintiff, his heirs, administrators, and assigns for the term of fourteen years from the said 24th day of January, 1860, the full and exclusive right and liberty of making, constructing, using, and vending to others to be used, the said improvement, a description whereof is given in the schedule to the said letters-patent annexed, and made a part thereof, as by the said letters-patent and the said specification or schedule thereunto annexed will, among other
9 things, more fully and at large appear.

And the said plaintiff farther says that, from the time of the making and delivery of the said letters-patent until the present, he has always, by himself and his servents, made, used, and exercised the said improvement so as aforesaid invented by him, to his great advantage and profit, to wit, at the district aforesaid. Yet the said defendant well knowing the premises, but contriving and wrongfully and injuriously intending to injure the said plaintiff and to deprive him of the profits, benefits, and advantages which he might and otherwise would have derived and acquired from the making, using, exercising, and vending

of the said improvement, after the making and delivery of the said letters-patent as aforesaid, and within the term of years in the said letters-patent mentioned, to wit, on the first day of May, 1862, and at divers other times both before and after that time, and up to the time of the commencement of this suit, and within the district aforesaid, unlawfully and unjustly, and without the leave or license, and against the will of the said plaintiff, made, used, *excersed*, sold, and delivered to be used by others divers, to wit, one thousand, machines in imitation of and corresponding with the said improvement of the said plaintiff as aforesaid, in breach of said letters-patent, and against the right and privilege so granted to the said plaintiff, his heirs, executors, administrators, or assigns as aforesaid, whereby the said plaintiff has been and is greatly injured, and has been and is deprived of a great part of the profits and advantages which he might and otherwise would have derived and acquired from said improvement, to wit, at the district aforesaid. Wherefore the said plaintiff saith that he is injured and hath sustained damage to the amount of twenty thousand dollars; and therefore he brings suit, &c.

S. H. GEYER,
T. MACCONNELL & SON,
Attorneys for Plaintiff.

ALLEGHENY COUNTY, *ss:*

In the circuit court of the United States, western district of Penn'a.

WILLIAM L. GOULD
vs.
JAMES REES. } No. 113. Nov. T., 1866.

And the said defendant, by John Barton, his attorney, comes and defends the wrong and injury when, &c., and says that he is not guilty of the said supposed greivances laid to his charge or any, or either, or any part thereof, in manner and form as the said plaintiff hath above thereof complained against him. And of this he, the said defendant, puts himself upon the country, &c.

And the said defendant for further plea saith that the said plaintiff is, and was, not the first and original inventor of the improvements in steam-engines described in his said declaration but that the said alleged improvement, under the name of cam-shifters, were known and in common use upon the western waters upon *score* [screw] high-pressure engines for many years before the date of his, the said plaintiff's, letters-patent. And of this the said defendant puts himself upon the country.

JNO. BARTON,
Att'y for Pl'ff.

GOLD
vs.
REES. } No. 113. Nov'r T., 1866.

And now, November 10th, 1869, the plaintiff, by his attorney, moves the court that the special plea, filed in this case, be stricken off or that the defendant shall elect to proceed either under the plea of the general issue, with the notice under the 15th section of act of 1836, or under his special plea as filed.

Motion granted per curiam. Exceptions.

Counsel for defendant elects to proceed under the plea of the general issue of notice.

Per curiam.

(Indorsed:) No. 113. Nov., 1866. Gold vs. Rees. Motion to strike off special plea. Filed Nov 11, 1869.

13 WILLIAM L. GOULD
vs.
JAMES REES. } No. 113. November term, 1866.

And now, November 9th, 1869, the parties in this cause being at issue, a jury being called came, to-wit, John Shephard, William Blair, W'm H. Gibson, James Dunlavy, A. W. Scully, Henry M. Hoyt, D. B. Dykins, D. L. Hoge, James Robinson, C. W. Cunningham, Isaac Lytle, and George Miller, twelve good and lawful men who, having been duly summoned & returned, were ballotted for, empannelled, and sworn, to well and truly try this issue joined between W'm L. Gould, plaintiff, and James Rees, def't, and a true verdict render, according to the evidence, unless withdrawn by the parties or discharged by the court.

14 The witness, Thomas Rees, named in the notice of special matter is asked: *Wherever* [whether] or not, to his knowledge, before the apparatus testified to was put on the steamboats Laura or Harriet or either of them, that is, before the fall of 1855, any, & what, shifting apparatus was used on puppet-valve lever steam-engines on boats orth e western waters, embracing a link *on* [or] links, connected with the camrods working the steam valv's; and how such apparatus, if any was constructed, connected, and for what purpose?

(Objected to by pl't'ff's counsel—

1st. It is illegal and incompetent.

2nd. Pl't'ff has had no notice in reference to other vessels or engines beside the ones named in the notice.

3rd. The act of 1836, requires more than the name of the witness and his residence; it requires "and where the same had been used."

4th. No notice of any use prior to the Laura and Harriet.

5th. The question is general and not specific.

Question overruled and def't excepts. Per curiam.)

15 The defendant offer' in evidence a book in two volumes, entitled The Engineer and Machinist's Assistant, published in Glasgow in the year 1847, for the purpose of showing the state of the act prior to the pl'ff's alle*d*ged invention, by showing the application of shifting apparatus to slide-valve engines, the plaintiff [claiming] as new the apparatus patented by him as applied to puppet-valve engines. (Vol. 2, Plates 71 & 73; and vol. 1, pages 55 to 59.)

(Objected to by pl'ff's counsel—

1st. Because the offer is not embraced in the notice.

2nd. It is in conflict with express provissions of 15 section of act of 1836.

3. It is *our* [an] ingenious device to get in evidence under the head of "state of the act" that which is directly prohibited.

Objection overruled per curiam. Pl't'ff*s*, by his attorney, excepts to the decision of court admitting the evidence as above.)

(Indorsed:) No. 113. Nov. T., 1866. W'm L. Gould vs. James Rees. Offer and objection. Filed Nov. 12, 1869.

16 *Plaintiff's points.*

The court is requested to charge the jury—

1st. That experiments alone are not sufficient to constitute priority of invention. The article must be completed for public use.

2nd. The burden of proof, where prior invention and use are asserted, as in this case, is on the defendant, and he is bound to give the jury satisfactory evidence thereof.

3rd. Prior invention, in order to defeat a subsequent patent, must have been reduced to practical or successful use.

4th. If plaintiff for the first time brought together the different parts which constitute his invention, into one whole thing, which is materially different from any whole arrangement that existed before, he is the legal inventor.

These points are affirmed.

Per curiam.

(Indorsed:) No. 113. Nov. T., 1866. W'm L. Gold vs. James Rees. Pl'ff's points. Filed Nov. 15, 1869.

17 *Def't's points.*

W'm L. Gold
vs.
James Rees.

The court is requested to charge the jury—

First. That if the jury find that the patentee was not the first inventor of the thing patented, the patent is void, and the plaintiff cannot recover, even though he was an original inventor.

Second. That if the jury believe that the patentee was not the first inventor of those devices or combination of devices claimed in the patent, which are alleged to have been used by the defendant, the plaintiff cannot recover.

Third. That in ascertaining what the invention is that is covered by the patent, the summing up or claim of the invention is conclusive on the plaintiff, and the patent must stand or fall by it.

Fourth. That the scope of the invention cannot be enlarged or altered by the description in a caveat previously filed.

Fifth. That when a combination of mechanical devices is claimed,
18 it is not infringed by the use of a combination, differing substantially in any of its parts, and that the omission of one essential feature or element of the combination as claimed, avoids the infringement.

Sixth. That the first claim of the plaintiff's patent in the following words, to wit: "I claim the flanges *i* on the reversing crank or arm *h*, and the projection *t* on the cam-rod *e*, when used for the purpose of guiding the hooks 1 and 2 into their proper position on the wrist 3 and 4 of the reversing-crank or arm *h*, as described and set forth," is for a combination of the arm *h*, having flanges *i* with the cam-rod *e*, having a projection *t*, and is not infringed by the use of either of the element' of the combination, without the other, nor by the use of the arm *h*, if without the flanges *i*, or of the cam-rod *e*, without the projection *t*.

Seventh. That the second claim of the plaintiff's patent, to wit: "The use of the link *m* or its equivalent, when used in connection with

the cam-rods *f* and *g*, reversing crank or arm *h*, and the crank or arm *l*, as described, and for the purpose set forth," is for the connection
19 with the link *m*, or a substantially similar device having similar functions of the cam-rods *f* and *g*, the reversing-crank *h*, and the crank or arm *l*, and that the omission to use any one of these devices avoids the infringement.

Eight'. That the use of a combination of the link *m*, in connection with the cam-rods *f* and *g*, the crank or arm *l*, with a reversing-arm not having flanges *i*, such as are mentioned in the first claim of the patent is not an infringement of the second claim by reason of the arm *h*, as described and claimed, not being used in such combination.

Ninth. That the third claim of plaintiff's patent, to wit: "The use of the connecting-rods *e* and *f*, or their equivalent, when used in combination with the link *m*, cam-rod *e*, and levers *p* and *r*, as described and for the purpose set forth" is for the combination of the several devices named, or some substantially similar devices, performing substantially the same functions, and that the omission to use any one of these devices, or its equivalent device, avoids an infringement of the claim.

Tenth. That the doctrine of mechanical equivalent cannot be invoked to aid a combination claim for old devices, and that therefore if a
20 combination has three different known parts, and the result is accomplished by union of all these parts arranged with reference to each other, the use of two of these parts only, combined with a third substantially different from the former, is not the same combination and therefore no infringement.

Eleventh. That if a substantial part of the thing patented was not new, when invented by the patentee, the patent is void, if the patentee unreasonably neglected to file a disclaimer to such part as was not new, and in such case the plaintiff cannot recover.

Twelfth. That if the defendant used the thing patented before the plaintiff's application for a patent, the plaintiff cannot recover against him for use of the specific machine or thing so used before his application.

Thirteenth. That if those devices or combination of devices claimed by the patentee in his patent, and used by the defendant, were publicly used or used in public by the defendant or any other person, even without the knowledge and consent of the alleged inventor, before the date of his invention, the plaintiff cannot recover.

21 Fourteenth. That if the devices or combination of devices claimed by the patentee in his patent, and used by the defendant, were publicly used or used in public by the defendant or by any other person more than two years prior to the plaintiff's application for his patent, the patent is void as to such claim, even through the patentee was ignorant of such use, and the plaintiff cannot recover.

Fifteenth. That, in ab[sence] of proof of date of application by the plaintiff, the date of the grant of the patent is to be taken as the date.

Sixteenth. That the date of filing or swearing to a caveat cannot be taken as evidence of the date of application for patent.

Seventeenth. That if the jury believe that the devices shewn in the drawings marked "Laura" and "Harriet" respectively, were in use by the defendant in public on puppet-valve steam-engines for more than two years before the plaintiff applied for his patent, or at any time before his invention, and that those devices are substantially the same as those used by the defendant, since the issue of the plaintiff's patent, he, the plaintiff, cannot recover.

22 Eighteenth. That the useing of said devices, shown in drawings

marked "Harriet" and "Laura" respectively, by applying them to an engine on board of a steamboat or steamboats, is a public use of such device or devices.

Nineteenth. That a claim for a combination or arrangement of devices for producing a certain result, in connection with a steam-engine, is not a valid claim as applied to a steam-engine having lifting or puppet-valves, if a like or substantially similar combination or arrangement of devices has been formerly known and used in connection with a steam-engine having sliding-valves to produce the same result in substantially the same manner, but is a double use, and therefore not patentable.

23 U. S. circuit court.

GOULD *vs.* REES. } Infringement of a patent.

Before Judge McCandless and a jury.

Answer to defendants.

POINTS.

1, 2, 3. The three first points are affirmed.

4. So is the fourth.

5. If the jury believe that the mechanical devices used by Rees, although differing in mechanical form or construction, are equivalents to those patented and used in the combination patented to produce the same result, it is an infringement of the patent; and this, although there is an omission of one of the features of the combination. It is the ordinary device resorted to by those who design to infringe, and who have been unsuccessful in their experiments to produce a desired result. The law secures to the patentee the right to the use of his machine, provided it consists of a new combination, although composed of parts well known and in common use.

24 6th. The use of the combination is an infringement; and the omission of one of the elements and the substitution of another mechanical device to perform the same function will not avoid the infringement. All the elements of the machine may be old, and the invention consist in a new combination of those elements, whereby a new and useful result is obtained. Most of the modern inventions are of this latter kind, and many of them are of great utility and value.

7th. This is already answered in my reply to the sixth point, and we refuse so to charge you.

8th. This instruction is also refused.

9th. This is substantially the same as the questions presented in the three preceding points, and is refused.

10th. We do not sit here to decide abstract questions, nor all the principles involved in the patent laws in the trial of a single case. It is enough for us to deal with that which is before us. It is for the jury to say whether any such case is presented by the evidence. If a machine consists of three elements, neither of which, singly, is patented,

25 but a combination of the three to produce a given result is patented, and some Solomon discovers that by the use of two of these elements, without the aid of the third, he can produce precisely the same result, why, of course, it is no infringement, but a decided improvement,

for which he is entitled to be classed as a public benefactor. But if he takes the third element, and by a slight alteration of its form, used its combination with the other two, it is what the law, in no very gentle terms, denominates piracy, because he is appropriating to himself the fruits of other men's brains.

11th. The question does not arise in this case. The claim is not for each separate part of the machine, but for a combination of the whole to produce a desired result.

12th. This point is affirmed.

13th. If this machine was in public use before the date of the invention, either with or without the knowledge of the inventor, then there can be no recovery. It is for the jury to say whether such a device as is here presented by the model was ever in use before the invention by Gould.

14th. This is so; but the burden of proof is upon the defend-
26 ant to satisfactorily show to the jury that such was the fact.

15th. This is affirmed.

16th. So is this.

17th. I have already answered this in my reply to a previous point.

18th. The application of the device to a steamboat would be such public use.

19th. We refuse to charge you as requested in this point. There is no proof that it was ever used on a sliding-valve engine on a steamboat. There is some evidence that the link, a part of the d*erive* patented, was used in the machinery of a locomotive, and that only for the purpose of a reverse motion.

Per curiam.

Nov. 15th, 1869.

27 In U. S. D. C.

WILLIAM J. GOLD *vs.* JAMES REES. } Action on patent.

Now, 15 November, 1869, the jury find a verdict in favor ot plaintiff for the sum of four hundred dollars.

JNO. SHEPHARD.	DANIEL B. DYKINS.
WILLIAM BLAIR.	D. L. HOGE.
W'M H. GIBSON.	JA'S ROBINSON.
JA'S DUNLAY.	C. W. CUNNINGHAM.
N. W. SEELY.	ISAAC LYTLE.
HENRY M. HOYT.	GEO. MILLER.

(Indorsed:) No. 113. Nov. T., 1869. W'm L. Gold vs. James Rees. Verdict. Filed Nov. 16, 1869.

28 In C. C. of U. S.

W'M L. GOLD *vs.* JAMES REES.

And now, Dec'r 7, 1869, the pl't'ff, by P. C. Shannon, his attorney,

moves the court that judgement be rendered on the verdict for four hundred dollars, with costs.

Motion allowed Dec'r 7th, 1869.

(Indorsed:) No. 113. Nov. T., 1866. W'm L. Gold vs. James Rees. Motion allowed, and filed Dec'r 7th, 1869. P. C. Shannon.

29 Supreme Court U. S.

JAMES REES, PL'FF IN ERROR,
vs.
WILLIAM L. GOLD, DEF'T IN ERROR.

Issue writ of error to the U. S. circuit court for the western district of Pennsylvania, returnable to next term.

W. BAKEWELL,
Att'y for Pl'ff in Error.

To H. SPROUL,
Clk U. S. C. C. W. D. of Pa.

DEC. 13, 1869.

(Indorsed:) No. 113. Nov. T., 1866. W'm L. Gold vs. James Rees Prec'e for writ of error.

30 JAMES REES, PLAINTIFF IN ERROR,
vs.
WILLIAM L. GOLD, DEFENDANT IN ERROR.

Know all men by these presents that we, James Rees and Jared M. Brush, of the city of Pittsburgh, in the county of Allegheny, and State of Pennsylvania, are held and firmly bound unto the above-named William L. Gold, in the sum of one thousand dollars, to be paid to the said William L. Gold, his executors, or administrators; to which payment, well and truly to be made, we do bind ourselves, and each of us, jointly and severally, and our and each of our heirs, executors, and administrators, firmly by these presents, sealed with our seals, and dated this fifteenth day of December, anno Domini one thousand eight hundred and sixty-nine.

Whereas, the above-named James Rees hath prosecuted a writ of error to the Supreme Court of the United States, to reverse the judgment rendered in a suit in the circuit court of the United States for the third circuit and western district of Pennsylvania, wherein the said William L. Gold was plaintiff, and the said James Rees was defendant, the said suit being No. 113, Nov. term, 1866:

31 Now, the condition of this obligation is such, that if the above-named James Rees shall prosecute his said writ of error to effect, and answer all damages and costs in said suit, and just damages for delay, and costs and interest on the appeal, if he shall fail to make good his plea, then this obligation shall be void; otherwise, the same shall be and remain in full force and virtue.

JAMES REES. [SEAL.]
JARED M. BRUSH. [SEAL.]

Sealed and delivered in presence of—
JAMES S. PATTERSON, JR.
GEO. H. CHRISTY.

Bond approved.
Per curiam.
Dec'r 15th, 1869.

(Indorsed:) No. 113. Nov. T., 1866. W'm L. Gold vs. James Rees. Bond approved per curiam Dec. 15th, 1869.

32 UNITED STATES OF AMERICA, *ss:*

The President of the United States of America to the judges of the circuit court of the United States for the third circuit and western district of Pennsylvania, greeting:

Because, in the record and proceedings, as also in the rendition of a judgment in a plea which is in the said circuit court before you, between William L. Gold and James Rees, a manifest error hath happened, to the great damage of the said James Rees, as by his complaint appears, and it being fit that the error, if any there hath been, should be duly corrected, and full and speedy justice done to the parties aforesaid in this behalf, you are hereby commanded, if judgment be therein given, that then, under your seal, distinctly and openly, you send the record and proceedings aforesaid, with all things concerning the same, to the Supreme Court of the United States, together with this writ, so that you have the same at Washington on the first Monday of December next, in the said Supreme Court, to be then and there held, that, the record and proceedings aforesaid being inspected, the said Supreme Court may cause further to be done therein to correct that error, what of right and according to the law and custom of the United States should be done.

Witness the Honorable Salmon P. Chase, Chief Justice of the said Supreme Court of the United States, this 15th day of December, in the year of our Lord one thousand eight hundred and sixty-nine, and of the independence of the United States the 94th.

WILSON McCANDLESS,
U. S. District Judge, sitting at Circuit.

[SEAL.] Attest: H. SPROUL,
Clerk U. S. Circuit Court.

33 UNITED STATES OF AMERICA, *ss:*

To WILLIAM L. GOLD, greeting:

You are hereby cited and admonished to be and appear at a Supreme Court of the United States, to be holden at Washington, on the first Monday in December next, (1870,) pursuant to a writ of error filed in the clerk's office of the circuit court of the United States for the third circuit and western district of Pennsylvania, wherein James Rees is plaintiff and you are defendant in error, to show cause, if any there be, why the judgment, in the said writ of error mentioned, should not be corrected, and speedy justice should not be done to the parties in that behalf.

Witness the Honorable Wilson McCandless, judge of the U. S. district court, western district of Pennsylvania, at the court-house, in the city of Pittsburg, this 15th day of December, 1869.

WILSON McCANDLESS,
U. S. District Judge, sitting at Circuit.

Dec. 16, 1869. Served on William L. Gold, by leaving a copy with a member of his family, and at his usual place of abode.

JOHN HERRON, *Dep'y.*

(Indorsed:) No. 113. W'm L. Gold vs. James Rees. Citation.

34 Be it remembered that, in the November term, in the year of our Lord one thousand eight hundred and sixty-six, came William L. Gold, a citizen of the State of Pennsylvania, by S. H. Geyer, his attorney, into the circuit court of the United States in and for the western district of Pennsylvania, before the judges thereof, and impleaded James Rees, a citizen of the State of Pennsylvania, in a certain plea of trespass on the case for infringement of letters-patent, on which said William L. Gold declared against him, that James Rees, a citizen of said western district of Pennsylvania, was summoned to answer William L. Gold, a citizen of the United States and of said district, of a plea of trespass on the case, &c.

Whereupon, the said plaintiff, by Stephen H. Geyer, esq'r, his attorney, complains that the said plaintiff, before and at the time of the making of the letters-patent, and of the committing of the grievances by the said defendant hereinafter mentioned, was the true and first inventor of a certain "improvement in steam-engines," to wit, a new and improved mode of operating and handling steam-engines, the nature of which invention consists in so arranging and constructing the cranks or arms of the lifters and cam-rods of *of* popped-valve engines, that

35 they may be operated and handle' with ease and speed, by means of levers and connecting rods, &c., to wit, at the district aforesaid. And thereupon the United States of America, to wit, on the 24th day of January, 1860, at the district aforesaid, by its letters-patent bearing date the said 24th day of January, 1860, under the seal of the Patent Office, signed by the Secretary of the Interior, and countersigned by the Commissioner of Patents, and then and there delivered by the said United States to the said plaintiff, which letters-patent, with the specifications and schedules thereunto annexed, signed, and countersigned and sealed as aforesaid, the said plaintiff now produces in court here, the date whereof is the day and year aforesaid, did grant, according to law, to the said plaintiff, his heirs, administrators, or assigns, for the term of fourteen years from the said 24th day of January, one thousand eight hundred and sixty, the full and exclusive right and liberty of making, constructing, using, and vending to others to be used, the said improvement, a description whereof is given [in] the schedule to the said letters-patent annexed and made a part thereof, as by the said letters-patent and the annexed specification or schedule thereto annexed, and now produced in court here, will, among other things, more fully and at large appear.

36 And the said plaintiff further says that, from the time of the making and delivery of the said letters-patent until the present, he has always, by himself and his servants, made, used, and exercised the said improvement, so as aforesaid invented by him, to his great advantage and profit, to wit, at the district aforesaid; yet the said defendant, well knowing the premises, but contriving and wrongfully and injuriously intending to injure the said plaintiff, and to deprive him of the profits, benefits, and advantages which he might, and otherwise would, have derived and acquired from the making, using, exercising, and vending of the said improvement, after the making and delivery of the said letters-patent as aforesaid, and within the said term of years

in the said letters-patent mentioned, to wit, on the first day of May, 1862, and at divers others times both before that time, and between that time and the commencement of this suit, and within the district aforesaid, unlawfully and unjustly, without the leave or license, and against the will of the said plaintiff, made, used, sold, and delivered to be used by others, divers, to wit, one thousand, machines in imitation of, and corresponding with, the said improvement of the said plaintiff as
37 aforesaid, in breach of the said letters-patent, and against the privilege so granted to the said plaintiff, his heirs, administrators, or assigns as aforesaid, whereby the said plaintiff has been, and is, greatly injured, and has been, and is, deprived of a great part of the profits and advantages which he might, and otherwise would, have derived and acquired from the said improvement, to wit, at the district aforesaid. Wherefore the said plaintiff saith that he is injured, and hath sustained damage to the amount of twenty thousand dollars; and therefor' he brings suit, &c.

S. H. GEYER,
Pl'ff's Attorney.

Additional count filed by leave of court.

And the said plaintiff, by leave of the court for that purpose first had and obtained, farther says that he, the said plaintiff, before and at the time of the making of the letters-patent, and of the committing of the several grievances, by the said defendant hereinafter mentioned, was the true and first inventor of a certain improvement in steam-engines, to wit, a new and improved mode of operating and handling steam-engines, the nature of which invention consists in so arranging and constructing the cranks or arms of the lifters and cam-rods of popped-valve engines, that they may be operated and handled with ease and
38 speed by means of levers and connecting rods, &c., to wit, at the district aforesaid. And before the issuing of the letters-patent, and whilst he, the said plaintiff, was engaged in making experiments for the purpose of perfecting the same, preparatory to his applying for said letters-patent therefor, to wit, on the 2nd day of March, 1849, he duly filed in the office of the Commissioner of Patents in the city of Washington, a description of his said invention, as a caveat, agreeably to the provisions of the act of Congress in that case made and provided; and afterwards, to wit, on the 24th of January, 1860, the said United States of America, at the district aforesaid, by its letters-patent, bearing date that day, under the seal of the Patent Office, signed by the Secretary of the Interior, and countersigned by the Commissioner of Patents, and then and there delivered by the United States to the said plaintiff, which said letters-patent, signed, countersigned, and sealed as aforesaid, with the specification or schedule thereunto annexed, the said plaintiff now produces in court here, the date whereof is the day and year aforesaid, did grant, according to law, to him, the said plaintiff, his heirs, administrators, and assigns, for the term of fourteen years from the said 24th day of January, 1860, the full and
39 exclusive right and liberty of making, constructing, using, and vending to others to be used, the said improvement, a description whereof is given in the schedule to the said letters-patent annexed and made a part thereof, as by the said letters-patent and the said specification or schedule thereunto annexed, will, among other things, more fully and at large appear.

And the said plaintiff farther says that, from the time of the making

and delivery of the said letters-patent until the present, he has always, by himself and his servants, made, used, and exercised the said improvement so as aforesaid invented by him, to his great advantage and profit, to wit, at the district aforesaid; yet the said defendant well knowing the premises, but contriving and wrongfully, and injuriously intending to injure the said plaintiff, and to deprive him of the profits, benefits, and advantages which he might and otherwise would have derived and acquired from the making, using, exercising, and vending of the said improvement, after the making and the delivery of the said letters-patent as aforesaid, and within the term of years in the said letters-patent mentioned, to wit, on the first day of May, 1862, and at divers others times, both before and after that time, and up to the time
40 of the commencement of this suit, and within the district aforesaid, unlawfully and unjustly, and without leave or license, and against the will of the said plaintiff, made, used, exercised, sold, and delivered to be used by others, divers, to wit, one thousand machines in imitation of, and corresponding with, the said improvement of the said plaintiff as aforesaid, in breach of said letters-patent, and against the right and privilege so granted to the said plaintiff, his heirs, executors, administrators, or assigns as aforesaid, whereby the said plaintiff has been and is greatly injured, and has been and is deprived of a great part of the profits and advantages which he might and otherwise would have derived and acquired from said improvement, to wit, at the district aforesaid. Wherefore the said plaintiff saith that he is injured and hath sustained damage to the amount of twenty thousand dollars; and therefor' he brings suit, &c.

S. H. GEYER,
T. MACCONNELL & SON,
Attorneys for Plaintiff.

And the said defendant, to said declaration, pleaded as follows:

And the said defendant, by John Barton, his attorney, comes and defends the wrong and injury, when, &c., and says that he is not
41 guilty of the same supposed grievances laid to his charge, or any or either, or any part thereof, in manner and form as the said plaintiff hath above thereof complained against him.

And of this he, the said defendant, puts himself upon the country, &c.

And the said defendant, for further plea, saith that the said plaintiff is, and was, not the first and original inventor of the improvements in steam-engines described in his said declaration, but that the said alleged improvement under the name of "cam-shifters" were known and in common use upon the western waters upon lever high-pressure engines for many years before the date of his, the said plaintiff's, letters-patent; and of this the said defendant puts himself upon the country.

JNO. BARTON,
Att'y for Def't.

And thereupon issue was joined between the said William L. Gold and the said James Rees; and the said James Rees, by his attorney, John Barton, did, on the 9th day of September, A. D. 1867, having to said action plead the general issue as aforesaid, give notice in writing by service thereof on the said T. MacConnell & Son, the said plaintiff's attorney, on the said day last named, as follows, to wit:

42 The pl'ff and his attorneys are hereby notified that, on the trial of the above-stated cause the defendant will give in evidence and prove the fact that the alleged new and improved mode of operating

and handling steam-engines, of which the plaintiff claims to be the first and original inventor, was well known and generally used on the western waters, to wit, on steamboats navigating the Ohio and Mississippi Rivers, and using high-pressure lever-engines, long anterior to the 24th day of January, A. D. 1860, the date of the letters-patent declared on, viz, on the steamboats Laura & Harriet, built at Brownsville, Penn'a, by Capt. W. J. McCallister, in the summer of 1855, the said improvement commonly called cam-shifters being placed on board Oct. 29, 1855, and used from that time on said vessels for over three years.

On the steamboat Daniel B. Miller, built by Capt. J. A. Williams, at Pittsburgh, Penn'a, in 1859, cam-shifters put on Dec. 17th, 1859, and used during the life of the vessel.

On the steamer Lone Star, built at Pittsburgh, Penn'a, in 1859, by Capt. Thomas Stubblefield, said cam-shifters attached to her machinery on the 20th Dec., 1859, and used during the life of said vessel. That the same were in general and common use upon steamboats fitted
43 out for the western rivers from 1855 down to the present time, with the full knowledge of said patentee; that the names and residences of the witnesses by which we intend to prove all of the above special instances and general facts are—

James Rees, engine builder, Pittsburgh, Pa.
Thomas Rees, " " " "
Thomas H. Rees, " " " "
James McBride, pattern maker, Temperanceville, All'y Co.
Andrew Baird, " " Oakland T'p, All'g'y Co.
Daniel Playhey, grocer, Allegheny Co., Pa.
George Wilson, engineer, 2nd st., Pittsburg, Pa.
Robert Duffy, " " "
Alex. Gracey, " Collins T'p, Allegheny Co.
W'm Young, steamboatman, Chartiers T'p, All'y Co.
W'm Radcliff, engineer, " "
Job Wrisall, " Beaver County, Penn'a.
Tho's Hardileer, " " "
Andrew Watson, engineer, late U. S. inspector, Pittsburg.
Tho's Snowden, " " " " Allegheny Co.
Andrew Hartupee, engine builder, Pittsburgh, Pa.
Joseph P. Haigh, coal dealer, Allegheny City.
Ezekial Gordon, steamboat capt., " County.

Yours respectfully

JOHN BARTON,
Att'y for Defendant.

And afterwards, to wit, at a circuit court of the United States in and for the western district of Pennsylvania, held in the city of Pittsburgh, on the day of November, in the year one thousand eight
44 hundred and sixty-nine, befor' the Honorable Wilson McCandless, one of the judges of said court, the aforesaid issue so joined between the said parties aforesaid came on to be tried before a jury for that purpose, duly empanelled, that is to say, John Shephard, William Blair, William H. Gibson, James Dunlap, H. W. Seely, Henry M. Hoyt, Daniel B. Defkins, D. L. Hoge, Ja's Robinson, G. W. Cunningham, Isaac Lytle, and George Miller.

At which day came there as well the said William L. Gold, as the said James Rees, by their respective attorneys; and the jurors empanelled to try the said issue being called, also came, and were then and there in due manner chosen and sworn to try the said issue.

And upon the trial of that issue the counsel, learned in the law, for the said William L. Gold, to maintain and prove the said issue on his part, gave in evidence the letters-patent of the United States granted to said William L. Gold on the 24th day of January, A. D. 1860, mentioned in declaration of said plaintiff, a copy whereof is hereunto attached and marked "A."

And further gave in evidence a certified copy of a caveat filed by said plaintiff for substantially the same invention as is described in his said patent, which caveat was sworn to by said plaintiff on the 26th February, 1859, and filed in the United States Patent Office on the 2nd day of March, 1859.

45 And further gave in evidence the testimony of the said plaintiff, William L. Gold, tending to prove the date of his said invention, as follows:

"I was acquainted with Captain J. W. [Bouhoup;] he is dead. He called on me in December, 1858, to know if such an arrangement of machinery could be put up as to dispense with the necessity of handling machinery by hand or calling help. I told him I knew of no such arrangement, but to call in a few days and I would see what could be done. He called [around] in a few days and I showed him some detached drawings I had made with a pencil. He took them away and came back and said W. Hartupee could not understand them, and desired my attendance at the shop to explain them. I explained it to W. Hartupee, and he was satisfied the arrangement would work. I was engaged to go to Hartupee's shop to put this new arrangement on the steamboat John Ray. I was engaged there from the last of December, 1858, or first of January, 1859, to March, 1859. That was the first practical experiment I ever made of it. There was a trial trip of the steamboat John Ray. The machinery worked well."

And further, the said plaintiff gave in evidence the testimony of said William L. Gold, the plaintiff, to prove the nature of his invention as follows:

"I claim the reversing cranks or arms attached to the cross-

46 shaft, by which the exhaust levers are operated; I also claim the application of this link, as it is [swivelled] on the cut-off hook, and the full-stroke steam-hook. I claim the connection of these levers, arms, and cross-shafts, as they are connected with the link. The cross-shafts across the boats may be used under the deck, on the deck, or over the deck. I claim the flanges on the starting-bar. I don't claim the invention of the link. I claim the application of it for that purpose; it may be in different form or proportions. I claim the link not as inventor of it, but in its use in connection with the cam-rods, as they are attached to a lever-engine. I don't claim the invention of the connecting rods, but their use in connection with the link cam-rods and levers. I don't deny that the operating the reverse motion from the centre of the boat is old, but I do deny that it ever was done with a crank or arm of that kind; I mean the arm N."

On cross-examination the said witness, William L. Gold, said:

"I never put this machinery in use except for Captain Buhoup. The arm N, in the engines built by Rees, (the defendant,) have not the flanges *i*. I would not consider the use of this invention with a slide-valve engine an infring'ment of my patent, not if used with a slide-valve."

And further, the said plaintiff gave in evidence testimony tending to prove the use by said defendant of certain machinery *a* devices

alleged by said plaintiff to be an infringement of his said letters-patent.

And the said plaintiff, having closed the evidence offered to maintain and prove the said issue on his part, the counsel for the said plaintiff did move the court that the special plea filed in this case be stricken off, or that the defendant shall elect to proceed either under the plea of the general issue, with notice under the 13 section of the act of 1836, or under his special plea as filed.

But the counsel for defendant did then and there insist that the special plea of said defendant ought not to be stricken off; but that the said defendant might well plead the said special plea in addition to the plea of the general issue, accompanied with the notice of special matters, and that the 15th section of the act of July 4th, 1836, entitled "An act to promote the progress of the useful arts, and to repeal all acts and parts of acts heretofore made for that purpose," permitted the defendant to plead the general issue, and give the said act, and any special matter in evidence, of which notice in writing had been given to the plaintiff or his attorney thirty days before trial, tending to prove certain defences in said section of said act mentioned, but that the defendant was not thereby prohibited from also pleading special pleas, and that

18 under said special plea, as pleaded by the defendant, he might give in evidence testimony to prove the state of the art prior to the date of the letters-patent granted to said plaintiff; & that the defendant was not confined to the defences mentioned in said 15th section of the said act of July, 1836.

Whereupon the court then and there granted the motion of said plaintiff, and ordered that the defendant should elect either to proceed under the plea of the general issue and the notice of special matter, or under the special plea, and that one or other of said pleas should be stricken off. To which decision of said court the counsel for said James Rees did then and there, on behalf of said defendant, except, and did insist that said defendant ought not to be compelled to make such election, and that neither of his pleas should be stricken off, and did then and there request the court to seal this bill of exceptions, which was accordingly signed & sealed by the said judge, and order[ed] to be made part of the record of said case.

And the said defendant, by his counsel, as required by said order of court, elected to proceed under the plea of the general issue and notice.

And the said defendant, by his counsel, produced and examined sundry witnesses whose names and places of residence are stated in said notice of special matter before referred to, to wit, Thomas Rees, James McBride, Andrew Baird, Andrew Watson, & James Rees, who gave evidence tending to prove that [certain] machinery alleged by said witness to be similar to and substantially the same as that described and claimed in said plaintiff's patent had been publicly used on the puppet-valve lever steam-engines on board the steamboat Laura, at Pittsburgh, in the State of Pennsylvania, in the year 1855, on the puppet-valve lever steam-engines on board the steamboat Harriet, at Pittsburg, in the State of Pennsylvania, by the said defendant, in the fall of the year 1855, the said steamboats Laura and Harriet being given in said defendant's notice of special matter as instances of prior knowledge and use of said plaintiff's alleged invention; the said witnesses, in their testimony exhibiting and referring to certain drawings marked respectively "Laura" and "Harriet," which drawings were there and there put in evidence on the part of defendant representing said machinery as used on said steamboats;

copies of which two drawings are hereunto attached, making part
this bill of exceptions, and marked as above stated; and further, ten
ing to prove that, prior to the year 1855, machinery substantially like
construction and operation to that described and claimed in said plaint
iff's patent was well known, and had been publicly used on puppet-
valve lever

(Here follows 3 diagrams marked page 50.)

51 engines of steamboats, under the name of "cam shifters," for reversing the engines connected with *a* shafts and levers so as to work both engines at the same time, and also on locomotive engines its connection with slide-valves.

And the said defendant, by his counsel, proposed to ask one of the witnesses produced and sworn on his behalf, to wit, Thomas Rees, the following question: "Whether or not, to his knowledge, before the apparatus testified to was put on the steamboats Laura and Harriet, or either of them, that is, before the fall of 1855, any and what shifting apparatus was used on puppet-valve lever steam-engines on boats, on the western waters, embracing a link or links *annected* with the cam-rods working the steam valves; and how such apparatus, if any, was constructed and connected; and for what purpose?"

But the counsel for the plaintiff did then and there object to the said question being put to said witness, for the reasons:

1. It is illegal and incompetent.
2. Plaintiff has had no notice in reference to other vessels or engines beside the ones named in the notice.
3. The act of 1836 requires more than the name of the witness and his residence; it requires "and where the same had been used."

52 4. No notice of any use prior to the "Laura" and "Harriet."
5. The question is general and not specific.

And the counsel of said defendant did then and there insist before said court, that the said exceptions on the part of the plaintiff's counsel were not sufficient in law to testimony called for by said question; that the said Thomas Rees had been named in the notice of special matter as one of the persons whom said defendant proposed to prove to have had prior knowledge of the things patented. And that his place of residence was stated in said notice, and that in said notice, the said defendant had stated where the same had been used, to wit, "on the western waters, to wit, on steamboats navigating the Ohio and Mississippi Rivers," which notice was sufficient to embrace the question sought to be proposed to said witness: And further, that, independently of said notice of special matter, the said defendant had a right to prove the state of the art prior to the date of said plaintiff's patent and prior to the date of his alleged invention.

But the court did then and there sustain the objections made by plaintiff's counsel to the said proposed question, and did overrule said question. Whereupon the defendant's counsel did then and there on the behalf of said defendant, except to the aforesaid ruling and opinion of said judge, and insisted on his right to put said question to

53 said witness; and did then and there request the court to sign this bill of exceptions, which is accordingly signed and sealed by said judge, and ordered to be made a part of the record in said case.

And the said defendant did then and there also put in evidence a certain drawing, marked, "Echo," a copy of which is hereunto attached, marked "Echo," and forms a part of this bill of exceptions, together

the testimony of certain witnesses, to wit, Thomas Rees, James McBride, and James Rees, to prove that the machinery represented therein is the same as that used by the defendant, James Rees, since the date of said plaintiff's patent, and which is alleged and claimed by said plaintiff in said suit to be an infringement of his said patent.

And the evidence being closed on the part of the plaintiff and of the defendant, the counsel for the defendant then and there, and before the said judge commenced his [summing] up and charge to the jury, presented to the said judge certain points of law in writing, as being applicable to said case, and requested the said judge to charge the jury in accordance therewith, which points are as follows:

"That when a combination of mechanical devices is claimed, it is not infringed by the use of a combination differing substantially
54 in any of its parts, and that the omission of one essential feature or element of the combination as claimed, avoids the patent."

But the said judge, instead of charging as so requested, did instruct the jury as follows: "If the jury believe that the mechanical devices used by Rees, although differing in mechanical form or construction, are equivalent to those patented and used in the combination patented to produce the same result, it is an infringement of the patent. And this, though there is an omission of one of the features of the combination, the ordinary device resorted to by those who design to infringe, and have been unsuccessful in their experiments to produce a desired result. The law secures to the patentee the right to the use of machine, provided it consists of a new combination, although composed of parts well known and in common use."

The defendant's counsel also requested the court to charge the jury:

"That the first claim of the plaintiff's patent in the following words, to wit: 'I claim the flanges *i* on the reversing crank or arm *h*, and the projection *t* on the cam-rod *e*, when used for the purpose of guiding the hooks 1 and 2 into their proper position on the wrists 3 and 4 of the reversing crank or arm *h*, as described and set forth,' is for a
55 combination of the arm *h*, having flanges, with the cam-rod *e*, having a projection, *t*, and is not infringed by the use of either of the elements of the combination, without the other, nor by the use of the arm *h*, if without the flanges *i*, or of the cam-rod *e*, without
56 the projection *t*."

But the said judge, instead of charging as so requested, did instruct the jury as follows:

"The use of the combination is an infringement, and the omission of one of the ~~*statements*~~, and the substitution of another mechanical device to perform the same function will not avoid the infringement. All the elements of the machine may be old, and the invention consists in a new combination of those elements whereby a new and useful result is obtained. Most of the modern inventions are of this latter kind, and many of them are of great utility and value."

The defendant's counsel also requested the court to charge the jury:

"That the second claim of the plaintiff's patent, to wit, the use of the link *m* or its equivalent, where used in connection with the cam-rods *f* and *g*, reversing-crank or arm *h*, and the crank or arm *k*, as described, and for the purpose set forth, is for the connection with the link *m*, or a substantially similar device, having similar functions of the cam-rods *f* and *g*, and the reversing-crank [h] and the crank or arm *k*; and that the omission to use any one of these devices avoids the infringement."

But the said judge, instead of charging as so requested, did instruct the jury as follows:

"This is already answered in my reply to the sixth point, and
57 we refuse so to charge you."

(The sixth point was the point immediately preceding this one.)

The defendant's counsel also requested the court to charge the jury:

"That the use of a combination of the link *m* in connection with the cam-rods *f* and *g*, the crank *k* with a reversing-arm not having flanges, [i] such as are mentioned in the first claim of the patent, is not an infringement of the second claim, by reason of the arm [h] as described and claimed, not being used in such combination."

But the said judge, having read said point to the jury, instead of charging as so requested, did instruct the jury thereon as follows:

"This instruction is also refused."

The defendant's counsel also requested the court to charge the jury:

"That the third claim of plaintiff's patent, to wit, 'the use of the connecting-rods *g* and *g*, or their equivalents, when used in combination with the link *m*, cam-rod *e*, and levers *p* and *r*, as described, and for the purpose set forth,' is for the combination of the several devices named, or some substantially similar devices, performing substantially the same functions, and that the omission to use any one of these devices, or its equivalent device, avoids an infringement of the claim."

But the said judge, having read said point to the jury, instead
58 of charging as so requested, did instruct the jury as follows:

"This is substantially the same as the questions presented in the three preceding points, and is refused."

The defendant's counsel also requested the court to instruct the jury:

"That a claim for a combination or arrangement of devices, for producing a certain result in connection with a steam-engine, is not a valid claim as applied to a steam-engine having lifting or puppet-valves, if *or* [a] like or substantially similar combination or arrangement of devices has been personally known and used in connection with a steam-engine having sliding-valves, to produce the same result, in substantially the same manner, but is a double use, and therefore not patentable."

But the said judge, having read said points to the jury, instead of charging as so requested, did instruct the jury as follows:

"We refuse to charge you as requested in this point. There is no proof that it was ever used on a sliding-valve engine on a steamboat. There is some evidence that the link, or part of the device patented, was used in the machinery of a locomotive, and that only for the purpose of a reverse motion."

Whereupon the counsel for the said defendant did then and there, on behalf of the said James Rees, except to the aforesaid opinion
59 and charge of the said judge to the jury, and to the instructions so given to them in reply to the aforesaid six points made by the said defendant's counsel as aforesaid, and then and there insisted that the points so made were correct in law, and that the said judge ought to instruct the jury as requested, and that under the law, as set forth in said several parts, the plaintiff ought not to recover in said action against the said defendant.

And the said judge having delivered his opinion the jury aforesaid, and with that direction left the same to the said jury.

The jury aforesaid then and there, to wit, on the fifteenth day of November, 1869, gave their verdict for the said plaintiff, and four hundred dollars as damages.

And inasmuch as the several matters aforesaid in this bill of exceptions contained, and on the part of the counsel for said defendant, objected and insisted, do not appear by the record of the verdict aforesaid, the said counsel for the defendant did then and there propose their aforesaid exceptions to the several rulings, charge, and opinion of the said judge, and requested him to put his seal to this bill of exceptions.

And thereupon the said judge, at the request of the said counsel for the said James Rees, the defendant, hath put his seal to this bill of exceptions the fifteenth day of November, A. D. 1869.

WILSON McCANDLESS, [SEAL.]
U. S. District Judge, sitting at Circuit.

"A."

UNITED STATES OF AMERICA:

No. 26901.

to whom these letters-patent shall come:

Whereas William L. Gold, of Allegheny, Penn a, has alleged that he vented a new and useful improvement in steam-engines, which he has not been known or used before his application; has made hat he is a citizen of the United States; that he does verily be- that he is the original and first inventor or discoverer of the said ovement, and that the same hath not, to the best of his knowledge belief, been previously known or used; has paid into the Treasury of the United States the sum of thirty dollars, and presented a petition to the Commissioner of Patents, signifying a desire of obtaining an exclusive property in the said improvement, and praying that a patent may be granted for that purpose.

These are, therefore, to grant, according to law, to the said William L. Gold, his heirs, administrators, or assigns, for the term of fourteen years from the twenty-fourth day of January, one thousand eight hundred and sixty, the full and exclusive right and liberty of making, constructing, using, and vending to others to be used, the said improvement, a description whereof is given, in the words of the said William L. Gold, in the schedule hereunto annexed, and is made part of these presents.

[L. S.] In testimony whereof I have caused these letters to be made patent, and the seal of the Patent Office has been hereunto affixed.

Given under my hand, at the city of Washington, this twenty-fourth day of January, in the year of our Lord one thousand eight hundred and sixty, and of the independence of the United States of America the eighty-fourth.

JACOB THOMPSON,
Secretary of the Interior.

Countersigned, and sealed with the seal of the Patent Office.

W. D. BISHOP,
Commissioner of Patents.

(Here follows diagram, marked page 61.)

62 To all whom it may concern:

Be it known that I, William J. Gold, of the city and county of Allegheny, in the State of Pennsylvania, have invented a new and improved mode of operating and handling steam-engines; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon.

The nature of my invention consist' in so arranging and constructing the cranks or arms of the lifters and cam-rods of poppet-valve engines, that they may be operated and handled with ease and speed by means of levers and connecting-rods, the whole being arranged and constructed in the manner hereinafter described.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation:

In the accompanying drawing, Figure 1 is a face and sectional view of my improvement, and represents one-half of a cylinder of a poppet-valve engine on the "receiving *sitte* [side."]

Figure 2 is a face view of the reversing crank or arm, and also represents a sectional view of the cam and connecting-rods.

63 Figures 3 & 4 are cut or sectional views of the reversing crank or arm.

Figure 5 is a face, and

Figure 6 is a top view of the cam-rod which is used in connection with the reversing crank or arm.

Figure 7 is a top, and

Figure 8 is a side view of the cam-rods used for changing from cut-off to full stroke of steam.

Figure 9 is a face, and

Figure 10 is an edge view of the link which is used for changing the cam-rods from a cut-off to a full stroke of steam.

The engine, with valves, levers, lifters, and the cross-shafts to which the lifters are attached, are all constructed and arranged in the usual manner.

But the reversing arm and cam-rods are constructed and arranged as hereinafter described: *a* is the cylinder of the engine; *b* is the side pipe; *c* is the lever for operating the valves; *d* are the lifters which operate the levers *c*. The lifters *d* are attached to a cross-shaft marked (5;) to the cam-rod which is used for reversing the engine, and is used in connection with the reversing arm *h*, which is furnished with flanges wrists (3 & 4,) and guide-plate *j*. The cam-rod *e* is furnished with two hooks, marked (1 & 2,) and a projection on the inner side, marked

64 , see Figures (5 & 6.) This projection , in connection with the flanges *i*, on the reversing arm *h*, will guide the hooks (1 & 2) of the cam-rod *e* to their proper and desired position on the wrists (3 & 4. The cam-rod *e* has a hinge joint at *B*. To the cam-rod *e* is attached a rod, *o*, which is attached to the lever , which is secured to the shaft (x1.) By this arrangement of the shaft (x1,) lever , rod *o*, cam-rod *e*, and reversing arm *h*, (which is attached to the cross-shaft to which the lifters are attached which operate the levers of the exhaust valves,) a reverse or forward motion of the engine may be obtained by simply moving the lever back or forward, which will move the hooks of the cam-rod *e* on to the wrists (3 or 4.) When reversing the engine, the cam-rod *g* should be raised up so as to operate the crank or arm *l*. The cam-rods *f* and *g* are attached to the link *m*, which should be made in the form represented in Fig's (9 & 10.) The cam-rods *f* and *g* should be

made in the form represented in Fig's (7 & 8,) and secured in the link *m*, as represented in Fig. 2. It will be observed that the cam-rod *g* is attached to wrist (3) of the ~~receiving~~ arm *h*. The cams which operate the cam-rods *e* & *f* are always placed on the crank-shaft to which the pitman of the engine is attached. The cam-rod *f* is furnished with a hinge-joint at *A*. The link *m* is furnished with a slot, *n*, which is made to fit the wrist of the crank or arm *l*, and is attached to the rod *q*, which is attached to the lever *r* on shaft *x*. By this arrangement of the link *m*, cam-rods *f* & *g*, rod *q*, and lever *r*, in connection with the crank or arm *l*, the cut-off cam-rod *g*, which gives a full stroke of steam, may be thrown into gear by simply moving lever *r*. By suitably arranging arms projecting from the shafts (x1 & x,) and attaching rods to the cam-rods and said projections, as represented in Fig. 1 of the accompanying drawings, two engines may be placed under the control of one engineer.

The operation of my improvement is as follows: When the various parts are in the position represented in Figure 1 of the accompanying drawings, the engine will be working foreword with cut-off cam. When the cam-rod *f* is thrown out of gear, and the short cam-rod *g* thrown into gear, the engine will be working forward with a full stroke of steam. When the short cam-rod *g* is in gear, and the cam-rod *e* is raised up so as to bring the hook (1) into gear on the wrist (4) of the reversing arm *h*, the engine will be working backwards with a full stroke of steam. All of these various operations of the engine are accomplished by moving the levers *p* and *r* back or forward in accordance with the action desired of the engine.

Having thus described the nature, construction, and operation of my improvement, what I claim as of my invention and desire to secure by letters patent of the United States is—

First. The flanges *i* on the reversing crank or arm *h*, and the projection *t* on the cam-rod *e*, when used for the purpose of guiding the hooks (1 & 2) into their proper position on the wrists (3 & 4) of the reversing crank or arm *h*, as herein described and set forth.

Second. The use of the link *m*, or its equivalent, when used in connection with the cam-rods *f* & *g*, reversing crank or arm *h*, and the crank or arm *l*, as herein described, and for the purpose set forth.

Third. The use of the connecting rods *f* & *g*, or their equivalents, when used in combination with the link *m*, cam-rod *e*, and levers *p* & *r*, as herein described, and for the purpose set forth.

WM L. GOLD.

Witnesses:
JAMES J. JOHNSON.
GEORGE P. STECK.

UNITED STATES OF AMERICA,
Western District of Pennsylvania, ss:

I, H. D. Gamble, clerk of the circuit court of the United States in and for the western district of Pennsylvania, do hereby certify that the foregoing is a true and correct copy of the record and proceedings had in suit at No. 113, November term, 1866, wherein William L. Gould is plaintiff, and James Rees is defendant, and do certify that I have carefully examined and compared the same with the original, and that it is a true and correct copy thereof, as the same remains on file and of record in said clerk's office.

In testimony whereof witness my hand and the seal of said circuit court, at Pittsburgh, this 1st day of December, A. D. 1870.

[SEAL.] H. D. GAMBLE, *Clerk.*

[5-ct. int. rev. stamp, canceled.]

68 UNITED STATES OF AMERICA,
Western District of Penn'a, ss:

I, William M. McKennan, judge of the circuit court of the United States for the western district of Pennsylvania, do certify that H. D. Gamble, whose signature is to the foregoing certificate, was at the time of signing, and now is, the clerk of said circuit court, and is duly qualified to make the same, and that the said certificate is in due form of law.

In testimony whereof witness my hand this 8th day of Dec'r, A. D. 1870.

(Indorsement on cover:) No. 446. James Rees, plaintiff in error, vs. William L. Gould. W. Pennsylvania C. C. U. S. Filed 24th December, 1870.

IN THE

Supreme Court of the United States,

December Term, 1871.

JAMES REES, Plaintiff in Error,

vs.

WILLIAM L GOULD, Defendant in Error.

No. 446

Error to the Circuit Court of the United States

For the Western District of Pennsylvania.

BRIEF FOR PLAINTIFF IN ERROR.

W. BAKEWELL,

Counsel for Plaintiff in Error.

PRINTED BY BAKEWELL & MARTHENS PITTSBURGH.

APPENDIX.

NOTICE OF SPECIAL MATTER.

William L. Gould *vs.* James Rees.	Circuit Court of the United States, West. District of Penn'a. No. 113 November Term, 1866.

The plaintiff and his attorneys are hereby notified that on the trial of the above stated cause, the defendant will give in evidence, and prove the fact, that the alleged new and improved mode of operating and handling steam engines of which the plaintiff claims to be the first and original inventor, was well known and generally used on the western waters, to wit: on steamboats navigating the Ohio and Mississippi rivers, and using high pressure lever engines long anterior to the 24th day of January, A. D, 1860, the date of the Letters Patent declared on, viz.:

On the steamboats Laura and Harriet, built at Brownsville, Pennsylvania, by Capt. W. J. McCallister, in the summer of 1855, the said improvement commonly called cam shifters being placed on board October 29, 1855,

and used from that time on said vessels for over three years.

On the steamboat Daniel B. Miller built, by Capt. J. A. Williams, at Pittsburgh, Pa., in 1859, cam shifters put on December 17, 1859, and used during the life of the vessel.

On the steamer Lone Star, built at Pittsburgh, Pa., in 1859, by Capt. Thomas Stubblefield, said cam shifters attached to her machinery on the 20th of December, 1859, and used during the life of said vessel.

That the same were in general and common use upon steamboats fitted out for the western rivers, from 185[illegible] down to the present time, with the full knowledge of said patentee.

That the names and residences of the witnesses by which we intend to prove all of the above special instances and general facts, are

James Rees, engine builder, Pittsburgh, Pa.
Thomas Rees, " "
Thomas H. Rees, " "
James McBride, pattern maker, Temperanceville, Allegheny Co., Pa.
Andrew Baird, pattern maker, Oakland township, Allegheny Co., Pa.
Daniel Haghey, grocer, Allegheny City, Allegheny Co., Pennsylvania.
George Wilson, engineer, Second street, Pittsburgh, Pa.
Robert Duffey, engineer, Pittsburgh, Pa.

Alex. Gracey, engineer, Collins township, Allegheny Co., Pa.
Wm. Young, steamboat man, Chartiers township, Allegheny Co., Pa.
Wm. Radcliff, engineer, Allegheny Co., Pa.
Job Wrisall, engineer, Beaver County, Pa.
Thomas Hardileer, Beaver County, Pa.
Andrew Watson, engineer, late United States Inspector, Pittsburgh, Pa.
Thos. Snowden, engineer, late United States Inspector, Allegheny Co., Pa.
Andrew Hartupee, engine builder, Pittsburgh, Pa.
Joseph P. Haigh, coal dealer, Allegheny City, Pa.
Ezekiel Gordon, steamboat captain, Allegheny Co., Pa.

Yours, respectfully,

JOHN BARTON,
Attorney for Defendant.

Served on us this 9th day of September, 1867, by copy.

T. MACCONNELL & SON,
Plaintiff's Attorneys.

LETTERS PATENT,

No. 26,901, DATED 24TH JANUARY, 1860.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, William L. Gold, of the City and County of Allegheny, in the State of Pennsylvania, have invented a new and improved mode of operating and handling steam engines, and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon.

The nature of my invention consists in so arranging and constructing the cranks or arms of the lifters and cam rods of puppet valve engines, that they may be operated and handled with ease and speed by means of levers and connecting rods, the whole being arranged and constructed in the manner hereinafter described:

To enable others, skilled in the art, to make and use my invention, I will proceed to describe its construction and operation.

In the accompanying drawing,

Figure 1, is a face and sectional view of my improvement, and represents one half of a cylinder of a puppet valve engine on the "receiving side."

Figure 2, is a face view of the reversing crank or arm, and also represents a sectional view of the cam and connecting rods.

Figures 3 and 4, are cut or sectional views of the reversing crank or arm.

Figure 5, is a face, and

Figure 6, is a top view of the cam rod which is used in connection with the reversing crank or arm.

Figure 7, is a top, and

Figure 8, is a side view of the cam-rods used for changing from cut-off to full stroke of steam.

Figure 9, is a face, and

Figure 10, is an edge view of the link which is used for changing the cam rods from a cut-off to a full stroke of steam.

The engine with valves, levers, lifters and the cross shafts to which the lifters are attached, are all constructed and arranged in the usual manner. But the reversing arm and cam rods are constructed and arranged as hereinafter described. *a*, is the cylinder of the engine, *b*, is the side pipe, *c*, is the lever for operating the valves, *d*, are the lifters which operate the levers *c*. The lifters *d*, are attached to a cross shaft marked 5; *l*, is the cam rod, which is used for reversing the engine and is used in connection with the reversing arm *h*, which is furnished with flanges *i*, wrists 3 and 4 and guide plate *j*. The cam rod *e*, is furnished with two hooks marked 1 and 2, and a projection on the inner side marked *r*, (see figures 5 and 6,) this projection *r*, in connection with the flanges *i*, on the reversing arm *h*, will guide the hooks 1 and 2 of the cam rod *e*, to their proper and desired position on the wrists 3 and 4. The cam rod *e*, has a hinge joint at *B*. To the cam rod *e* is attached a rod *o*, which is at-

tached to the lever *h*, which is secured to the shaft x′. By this arrangement of the shaft x′, lever *h*, rod *o*, cam rod *e*, and reversing arm *h*, (which is attached to the cross shaft to which the lifters are attached which operate the levers of the exhaust valves,) a reverse or forward motion of the engine may be obtained, by simply moving the lever *h*, back or forward, which will move the hooks of the cam rod *e*, on to the wrists (3 or 4). When reversing the engine the cam rod *g*, should be raised up, so as to operate the crank or arm *l*.

The cam rods *f* and *g* are attached to the link *m*, which should be made in the form represented in figures 9 and 10. The cam rods *f* and *g*, should be made in the form represented in figures 7 and 8, and secured in the link *m*, as represented in Fig. 2. It will be observed that the cam rod *g*, is attached to wrist 3, of the receiving arm *h*. The cams which operate the cam rods *e* and *f*, are always placed on the crank shaft to which the pitman of the engine is attached. The cam rod *f*, s furnished with a hinge joint at *A*. The link *m* is furnished with a slot *n*, which is made to fit the wrist of the crank or arm *l*, and is attached to the rod *q*, which is attached to the lever *r* on shaft *x*.

By this arrangement of the link *m*, cam rods *f* and *g*, rod *q* and lever *r*, in connection with the crank or arm *l*, the cut-off cam rod *g*, which gives a full stroke of steam may be thrown into gear by simply moving lever *r*. By suitably arranging arms, projecting from the shafts x′ and *x*, and attaching rods to the cam rods, and said projections as represented in Fig. 1 of the accompanying

drawings, two engines may be placed under the control of one engineer.

The operation of my improvement is as follows:

When the various parts are in the position represented in Fig. 1, of the accompanying drawings, the engine will be working forward with cut-off cam, when the cam rod *f*. is thrown out-of gear, and the short cam rod *g*, thrown into gear, the engine will be working forward with a full stroke of steam. When the short cam-rod *g* is in gear, and the cam rod *e*, is raised up so as to bring the hook 1 into gear, on the wrist 4 of the reversing arm *h*, the engine will be working backwards with a full stroke of steam. All of these various operations of the engine are accomplished by moving the levers *p* and *r* back or forwards in accordance with the action desired of the engine.

Having thus described the nature, construction an operation of my improvement, what I claim as of my invention and desire to secure by Letters Patent of the United States, is:

First. The flanges *i*, on the reversing crank or arm *h*, and the projection *t*, on the cam rod *e*, when used for the purpose of guiding the hooks 1 and 2, into their proper position on the wrists 3 and 4, of the reversing crank or arm *h*, as herein described and set forth.

Second. The use of the link *m* or its equivalen when used in connection with the cam rods *f* and *g*, reversing crank or arm *h*, and the crank or arm *l*, as herein described and for the purpose set forth.

Third. The use of the connecting rods *o* and *g*, or

their equivalents, when used in combination with the link *m*, cam rod *e*, and levers *p* and *r*, as herein described and for the purpose set forth.

Witness:
James J. Johnson,
George P. Steck.

WM. L. GOLD.

Harriet.

"Laura"

Echo

Supreme Court of the United States,

DECEMBER TERM, 1871.

JAMES REES, Plaintiff in Error,
vs.
WILLIAM L. GOULD, Defendant in Error. } No. 446.

Error to the Circuit Court of the United States for the Western District of Pennsylvania.

BRIEF FOR PLAINTIFF IN ERROR.

ABSTRACT OF THE CASE.

This was an action on the case brought by the defendant in error, William L. Gould, against the plaintiff in error, James Rees, in the Circuit Court for the Western District of Pennsylvania, for alleged infringement of Letters Patent of the United States, No. 26,901, granted to said William L. Gould, for "improvement in steam engines," and dated the 24th January, 1860.

The action was commenced on the 27th August, 1866.

Plaintiff filed his declaration on the 18th July, 1867, and subsequently filed an additional count, setting up a caveat filed by the plaintiff in the United States Patent Office for the same invention, on the 2d March, 1859.

Defendant plead the general issue in the usual form, and also a special plea. (See record, page 4, folio 4.) He also gave notice in writing of special matter which was duly served on the plaintiff's attorneys more than thirty days before the trial, to wit, on the 9th September, 1867.

A copy of this notice is given in full on page 14, folio 42 and 43 of the printed record.

The trial commenced on the 9th November, 1869, before Hon. Wilson McCandless, District Judge, sitting at circuit, and resulted in a verdict and judgment for the plaintiff.

At the close of the plaintiff's case, his counsel moved the Court that the special plea filed by defendant be stricken off, or that defendant shall elect to proceed either under the plea of the general issue, with notice under the 15th section of the Act of 1836, or under his special plea as filed.

This motion was granted by the Court, to which the defendant excepted; and under the ruling of the Court defendant elected to proceed under the plea of the general issue and notice. Exception was taken to this ruling; but will not be pressed on argument, being regarded as unimportant in this case.

On the trial the plaintiff offered in evidence his Letters

Patent dated 24th January, 1860, a copy of the specification of which is given in the printed record at page 22, and at the close of this brief.

The invention is stated in the specification to be "a new and improved mode of operating and handling steam engines."

The specification states that "the engine with valves, levers, lifters, and the cross shafts to which the lifters are attached, are all constructed and arranged in the usual manner. But the reversing arm and cam rods are constructed and arranged as hereinafter described."

The claims are as follows:

"Having thus described the nature, construction and operation of my improvement, what I claim as of my invention and desire to secure by Letters Patent of the United States, is,

First. The flanges *i* on the reversing crank or arm *h*, and the projection *t* on the cam rod *e*, when used for the purpose of guiding the hooks 1 and 2 into their proper position on the wrists 3 and 4 of the reversing crank or arm *h*, as herein described and set forth.

Second. The use of the link *m*, or its equivalent, when used in connection with the cam rods *f* and *g*, reversing crank or arm *h*, and the crank or arm *l*, as herein described and for the purpose set forth.

Third. The use of the connecting rods *o* and *g*, or their equivalents, when used in combination with the link *m*, cam rod *e* and levers *p* and *r*, as herein described and for the purpose set forth.

It was proved on the part of plaintiff that the defendant put the engines on the steamboats Ida Rees, W.

H. Brown, Cussawago, and Echo, and that these engines were substantially similar in construction, each to the other, and were furnished with cam-shifters, alleged to be an infringement of plaintiff's patent.

The plaintiff, William L. Gould, being sworn as a witness on his own behalf, testified to the date of his invention as being in December, 1858 (see printed record, page 16, folio 45), and further testified in regard to his invention as follows :

"I claim the reversing cranks or arms attached to the cross shaft by which the exhaust levers are operated. I also claim the operation of this link as it is swivelled on the cut-off hook, and the full stroke steam hook,—I claim the connection of these levers, arms and cross shafts, as they are connected with the link. The cross shafts across the boat may be used under the deck, on the deck or over the deck. I claim the flanges in the starting bar. *I don't claim the invention of the link*. I claim the application of it for that purpose, it may be in different forms or proportions. I claim the link not as inventor of it, but in its use in connection with the cam rods as they are attached to a lever engine. I don't claim the invention of the connecting rods, but their use in connection with the link, cam rods and levers. I don't deny that the operating the reverse motion from the centre of the boat is old, but I do deny that it ever was done with a crank or arm of that kind. I mean the arm *h*." *The arm* h *in the engines built by Rees* (the defendant) *have not the flanges* i. *I would not consider the use of this invention with a slide valve engine an infringement of my patent*, not if used with *a slide valve*.

The defendant under the plea of the general issue and notice of special matter, proved, by witnesses named in said notice, the use by defendant of cam shifting devices on puppet valve lever steam engines on the steamboats Laura and Harriet, in the year 1855, and alleged to be substantially the same as those described in the plaintiff's patent, excepting as to the peculiar construction of the reversing arm *b*, and produced drawings thereof in evidence, photographs of which are contained in the bill of exceptions, and in this brief.

The defendant also, in order to prove the state of the art at and before the time of the plaintiff's alleged invention, asked Thomas Rees, one of defendant's witnesses named in said notice of special matter, the following question (printed record, page 18, folio 51):

"Whether or not, to his knowledge, before the apparatus testified to was put on the steamboats Laura and Harriet, or either of them, that is before the fall of 1855, any, and what, shifting apparatus was used on puppet-valve lever steam engines on boats, on the western waters, embracing a link or links connected with the cam rods working the steam valves; and how such apparatus, if any, was constructed and connected, and for what purpose?"

To which question the plaintiff's counsel objected; and the Court sustained the objection and overruled the question; to which ruling of the Court the defendant's counsel excepted.

This forms the first specification of error.

The defendant further gave in evidence a drawing of

the apparatus on the steamboat Echo, alleged by plaintiff to be an infringement of his patent, with proof that said drawing represented the apparatus used by defendant since the date of plaintiff's patent.

A photograph of this drawing marked "Echo," is contained in the bill of exceptions, and in this brief.

The defendant also put in evidence a book in two volumes entitled the Engineer and Machinists' Assistant, published in 1847. showing the application of shifting apparatus to *slide valve engines*, the plaintiff claiming as new the apparatus patented to him as applied to *puppet-valve engines*. (See printed record, page 5, folio 15.)

The defendant's counsel, at the close of the evidence, presented to the judge certain points of law in writing, as being applicable to the case, and requested the said judge to charge the jury in accordance therewith.

These points are given at length in the printed record, page 6, *et seq*.

The defendant's counsel excepted to the charge of the Court to the jury in reply to the 4th, 6th, 7th, 8th, 9th, and 19th points, which form the second, third, fourth, fifth, sixth and seventh specifications of error. These points and the charge of the Court in reply thereto are given *totidem verbis*, in the specifications of error.

SPECIFICATIONS OF ERROR.

1st. The Court erred in overruling the following question proposed to be put by the defendant's counsel to Thomas Rees, one of the witnesses called on behalf of the defendant, in order to prove the state of the art prior to date of plaintiff's alleged invention: "Whether or not to his knowledge before the apparatus testified to was put on the steamboats Laura and Harriet or either of them, that is, before the fall of 1855, any, and what, shifting apparatus was used on puppet-valve steam engines on boats on the western waters, embracing a link or links, connected with the cam rods working the steam valves; and how such apparatus, if any, was constructed and connected, and for what purpose?"

2d. The Court erred in instructing the jury in reply to the fourth point of law presented by the defendant's counsel, which point was in the following words:

"That when a combination of mechanical devices is claimed, it is not infringed by the use of a combination differing substantially in any of its parts, and that the omission of one essential feature or element of the combination as claimed avoids the patent."

The charge of the Court to said 4th point being as follows:

"If the jury believe that the mechanical devices used by Rees, although differing in mechanical form or con-

struction are equivalents to those patented and used in the combination patented to produce the same result, it is an infringement of the patent. And this, although there is an omission of one of the features of the combination. It is the ordinary device resorted to by those who design to infringe, and who have been unsuccessful in their experiments to produce a desired result. The law secures to the patentee the right to the use of his machine, provided it consists of a new combination, although composed of parts well known and in common use."

3d. The Court erred in instructing the jury in reply to the sixth point of law presented to him by the defendant's counsel, which point was in the following words:

"That the first claim of the plaintiff's patent in the following words, to wit: "I claim the flanges *i* on the reversing crank or arm *h*, and the projection *t*, on the cam rod *e*, when used for the purpose of guiding the hooks 1 and 2 into their proper position on the wrists 3 and 4 of the reversing crank or arm *h*, as described and set forth: is for a combination of the arm *h*, having flanges *i*, with the cam rod *e* having a projection *t*, and is not infringed by the use of either of the elements of the combination without the other, nor by the use of the arm *h* if without the flanges *i*; or of the cam rod *e* without the projection *t*."

The charge of the Court to said sixth point being as follows:

"The use of the combination is an infringement, and the omission of one of the elements and the substitution of another mechanical device to perform the same function will not avoid the infringement. All the elements of the machine may be old, and the invention consists in a new combination of those elements whereby a new and useful result is obtained. Most of the modern inventions are of this latter kind, and many of them are of great utility and value."

4th. The Court erred in instructing the jury in reply to the seventh point of law presented to him by the defendant's counsel, which point was in the following words:

"That the second claim of the plaintiff's patent, to wit: 'The use of the link *m* or its equivalent when used in connection with the cam rods *f* and *g*, reversing crank or arm *h*, and the crank or arm *l* as described, and for the purpose set forth;' is for the connection with the link *m*, or a substantially similar device, having similar functions, of the cam rods *f* and *g*, and the reversing crank *h* and the crank or arm *l*, and that the omission to use any one of these devices avoids the infringement."

The charge of the Court to said seventh point being as follows:

"This is already answered in my reply to the sixth point, and I refuse so to charge you."

5th. The Court erred in instructing the jury in reply to the eighth point of law presented to him by the de-

fendant's counsel, which point was in the following words:

"That the use of a combination of the link *m* in connection with the cam rods *f* and *g*, the crank or arm *l* with a reversing arm *not* having flanges *i*, such as are mentioned in the first claim of the patent, is not an infringement of the second claim, by reason of the arm *h* as described and claimed not being used in such combination."

The charge of the Court to said eighth point being as follows:

"This instruction is also refused."

6th. The Court erred in instructing the jury in reply to the ninth point of law presented to him by the defendant's counsel, which point was in the following words:

'That the third claim of plaintiff's patent, to wit: "The use of the connecting rods *e* and *q*, or their equivalents when used in combination with the link *m*, or cam rod *e*, and levers *p* and *r*, as described and for the purpose set forth,' is for the combination of the several devices named, or some substantially similar devices, performing substantially the same functions, and that the omission to use any one of these devices, or its equivalent device, avoids an infringement of the claim."

The charge of the Court on said ninth point being as follows:

"This is substantially the same as questions presented in the three preceding points, and is refused."

7th. That the Court erred in instructing the jury in reply to the nineteenth point of law presented to him by the defendant's counsel, which point was in the following words:

"That a claim for a combination or arrangement of devices for producing a certain result in connection with a steam engine, is not a valid claim as applied to a steam engine having lifting or *puppet valves*, if a like or substantially similar combination or arrangement of devices has been formerly known and used in connection with a steam engine having *sliding valves*, to produce the same result in substantially the same manner, but is a double use, and therefore, not patentable."

The charge of the Court on said nineteenth point being in the following words:

"We refuse to charge you as requested in this point. There is no proof that it was ever used on a sliding valve engine *on a steamboat*. There is some evidence that the link, or part of the device patented, was used in the machinery of a locomotive, and that only for the purpose of a reverse motion."

BRIEF OF ARGUMENT FOR PLAINTIFF IN ERROR.

THE FIRST SPECIFICATION OF ERROR in this case has reference to the exclusion of testimony offered by defendant for the purpose of proving the *state of the art* prior to the date of plaintiff's patent, and of his alleged invention.

The question overruled was proposed to be put to Thomas Rees, a witness already examined for defendant, under the notice of special matter, as to the construction of cam-shifting apparatus (as it is called) on the steam boats Laura and Harriet, the engines of which had been built by defendant in 1855; the date of plaintiff's invention being December, 1858. This witness was then asked, "whether, prior to the fall of 1855, any and what cam-shifting apparatus was used on puppet valve lever steam engines, on boats on the western waters, embracing a link or links connected with the cam rods working the steam valves, how constructed, and for what purpose."

This question was objected to by the plaintiff's counsel, and ruled out by the Court.

The objections insisted upon were, that the defendant's notice did not refer to any other "vessels or en-

gines than those named in the notice;" that under the Act of 1836 the notice must state "where the same had been used;" and that there was no notice of any use *prior* to the Laura and Harriet, and that the question was general, and not specific.

These objections are all based on the 15th section of the Act of 1856.

It was claimed by defendant's counsel that the question proposed did not call for proof of prior knowledge and use of the plaintiff's patented invention, but did call for proof of the *state of the art* prior to 1855. That such proof was necessary in order to the correct interpretation of the plaintiff's claims; and that the proof, if admitted, would have shown the state of the art to be such, that the plaintiff's claims must be so limited and restricted as to make the apparatus used by the defendant to be no infringement of plaintiff's patent.

This evidence, if admitted, would have been followed by other similar proof of what devices were used for shifting the cams of lever engines prior to the date of plaintiff's invention, which would have confined the plaintiff's claim to the specific devices described in his patent, devices which were admitted to differ from those used by defendant.

The effect of the exclusion of testimony as to the prior state of the art was (as will be seen more fully on examination of the other specifications of error) to lead the Court to give a broad construction to the plaintiff's patent, covering other devices producing the same result.

No notice is required to be given of evidence tending

to prove the state of the art. Act of 4th July, 1836, § 15.

Evidence is "competent and and relevant showing the state of the art in respect to improvements in the manufacture at the date of plaintiff's invention. No notice was necessary in order to justify the admission of evidence for this purpose."

Vance vs. Campbell, 1 Black, 430.

The question not being asked for the purpose of proving prior knowledge and use of the plaintiff's invention, but merely to ascertain, by comparing his patented devices with the state of the art, what he really had invented, should not have been overruled for want of notice. If the answer to the question had revealed the fact of such prior knowledge and use, it would then be competent for the Court to instruct the jury to disregard it.

"Whatever is introduced to show the state of the art can have no effect on the case beyond the aid it may give the Court in *construing the patent*."

Middletown Tool Co. vs. Judd, 3 Fisher, 144.

THE SECOND SPECIFICATION OF ERROR is to the charge of the Court in answer to the following point offered by defendant's counsel:

That when a combination of mechanical devices is

claimed, it is not infringed by the use of a combination differing substantially in any of its parts; and,

That the omission of one essential feature or element of the combination as claimed, avoids the patent.

These propositions are fully sustained by authority.

Carver vs. Hyde, 16 Peters, 514, 518, 519.

In that case the patent was for an improved rib in a cotton gin, and the patentee claimed, first, the peculiar shape of the rib, and second, the sloping up of the inner surface of the rib, so that when inserted in the frame it should give a smooth passage upwards between the ribs. The plaintiff claimed that the defendant's rib differed from his "only by taking away a part wholly immaterial in the operation of ginning." But the Supreme Court held that the patentee, having described a peculiar mode of fastening the rib to the machine as a part of his invention, "if the defendants do not fix or fasten the ribs of their machine against the frame work, in the manner stated in the specification, either at all, or substantially in the same manner as the patentee, or fix or fasten it only in a manner known or used before the plaintiff's supposed invention, the defendants are not guilty of any violation or infringement of plaintiff's patent." Page 518.

So in *Prouty vs. Ruggles*, 16 Pet. 336, the patent was for the combination and arrangement of the parts of a plough. This Court says, "This combination composed of all the parts mentioned in the specification, and arranged with reference to each other and to other parts of the plough, in the manner therein described, is stated to be the improvement, and is the thing patented. The use

of any two of these parts only, or of two combined with a third *which is substantially different* in form or in the manner of its arrangement and connection with the others, is therefore not the thing patented. *It is not the same combination if it substantially differs from it in any of its parts.* The jogging of the standard with the beam, and its extension backward from the bolt, are both treated by the plaintiffs as essential parts of their combination for the purpose of brace and draft. Consequently the use of *either alone* [that is, the omission of one essential feature] would not be the same improvement, nor infringe the patent of the plaintiffs." Page 341.

So also in *Vance vs. Campbell*, 1 Black, 429, this Court says, "Unless the combination is maintained the whole invention fails. The combination is an entirety, if one of the elements is given up, the thing claimed disappears."

Again, in *Brooks vs. Fiske*, 15 How. 219, the Court says:

"If a combination has three different known parts, and the result is accomplished by the union of all these parts arranged with reference to each other, the use of two of these parts only, combined with a third, substantially different from the former, is not the same combination and no interference."

There are numerous authorities to the same effect.

Barrett vs. Hall, 1 Mass. 474.
Brooks vs. Bicknell, 4 McLean, 73.
Stimpson vs. Balt. & Sus. R. R., 10 How. 43.
Foster vs. Moore, 1 Curtis, 292.
Mabie vs. Haskell, 2 Cliff. 511.

The Court below in charging the jury on this point, says, "If the jury believe that the mechanical devices used by Rees, although differing in mechanical form or combination, are equivalents to those patented and used in the combination patented to produce the same result, it is an infringement of the patent, *and this although there is an omission of one of the features of the combination.*"

The first portion of this instruction is entirely too broad a statement of the doctrine of mechanical equivalents as applied to mere combinations of old devices, and was clearly erroneous.

See *McCormick vs. Talcott*, 20 How. 405.

It is not denied that the doctrine of equivalents may be invoked by the patentee of a combination to prevent mere colorable evasions of his rights; but it will be noticed that the point as presented to the Court below referred to "a combination *differing substantially* in any of its parts," and to "the omission of one *essential feature.*"

And there certainly was error in the latter part of the instruction that the omission of one of the features of the combination would make no difference in the question of infringement.

THE THIRD SPECIFICATION OF ERROR, as well as the 4th, 5th and 6th, refer to the construction of the claims of the plaintiff's patent. This specification refers to the first claim.

This claim has reference to certain improvements in the reversing arm and cam-rod, well known devices which had been used on steam engines many years before plaintiff's alleged invention.

The reversing arm is designed to stop, start or reverse the engine at pleasure; the reversing being effected by changing the position of the cam rod to the opposite side of the centre of motion of the reversing arm. The improvement described in plaintiff's specification consisted in adding flanges *i* to the reversing arm *h*, and a projection *t* to the cam rod, which projection *t* worked in the flanges *i*, so as to guide the hooks 1 and 2 on the cam rod to their proper places on the wrists 3 and 4 of the reversing arm. All that is claimed as new is the flanges on the arm *h* and the corresponding projection *t* on the cam rod. These devices work together, they have no other purpose or function. *The first claim is in terms confined to these devices.* The Court is asked to instruct the jury that the claim is for a combination of the arm with flanges and the cam rod with projection, and is not infringed by the use of either of the elements of the combination without the other, or of the arm without the flange, or of the cam rod without the projection.

The proposition is simple and the conclusion inevitable.

The plaintiff in his testimony (printed record, page 16, folio 45) says, "I claim the flanges in the starting bar," —"the arm *h* in the engines built by Rees have not the flanges *i*." It was not pretended that the defendant used either the flanges on the starting bar or arm *h*, or the projection on the rod *t*. The one would be of no use

without the other. He used no devices whatever, to perform the functions of these devices.

The Court instructed the jury that "the omission of one of the elements and the substitution of another mechanical device to perform the same function will not avoid the infringement."

This is really no answer to the point as stated; and if it were, it is erroneous, because the claim being for a specific device attached to an old and long used part of a steam engine, could not be infringed without the use of that device. Another and different device to produce the same result would not be an infringement. The doctrine of equivalents is not broad enough to cover *all* devices for accomplishing a result not new in itself.

Carter vs. Hyde, 16 Pet. 513.
McCormick vs. Talcott, 20 How. 405.
Bliss vs. Haight, 7 Blatch. 7.
Bigelow vs. Matthews, 7 Blatch. 77.

THE FOURTH SPECIFICATION OF ERROR has reference to the second claim of the patent. The Court was requested to charge the jury that the claim for—

"The use of the link *m* or its equivalent, when used in connection with the cam rods *f* and *g*, reversing crank or arm *h*, and the crank or arm *l*, as described, is for—

"The connection, with the link *m* or a substantially

similar device, having similar functions, of the cam rods *f* and *g* and the reversing crank *h* and the crank or arm *l*, and that the omission to use any one of these devices avoids the infringement."

The Court refused so to charge.

Now it is surely self-evident that "the connection of A with B, C and D, for a certain purpose, is the same thing as 'the connection of A, B, C and D,' for the same purpose;' and it is equally true that such a connection of mechanical parts to produce a certain result is in law a "combination."

It is not perceived that there can be any valid distinction drawn between a "combination" and "connection." If the parts are brought together they are combined, but this is not sufficient to secure patentability, the parts must be connected, they must be able to co-act so as to produce the desired result.

McCormick vs. Talcott, 20 How. 408.
Swift vs. Whisen, 3 Fish. 357–8.

If then this claim is for a "combination," the law is certainly applicable that the omission to use any one of the devices specifically named in the claim as entering into the combination, avoids the infringement.

See *Prouty vs. Ruggles*, 16 Peters, 341, and cases cited under the second specification of error.

This second claim is for the connection of certain parts of the steam engine, as follows: the link *m*, the cam rods *f* and *g*, the reversing arm *h*, and the crank *l*.

The instruction given by the Court to the jury is the same as that given on the 6th point, or in reference to

the first claim of the patent, with the addition of a distinct refusal to charge as requested. Referring then to the instruction given to the 6th point, we find the following: "All the elements of the machine may be old, and the invention consists in a new combination of those elements whereby a new and useful result is obtained."

This is certainly to be understood as an intimation from the Court that the devices used in this combination are all old; and such is in fact the case. The patentee in his testimony (printed record, p. 16, fol. 45) expressly says, "I don't claim the invention of the link." The reversing crank or arm *h* as used by defendant is old, for he did not use the flanges *i* (which constitutes the patentee's improvement on that device); and the cam rods and arm *l*, are all old devices.

But the Court further speaks of a new combination, "whereby a *new and useful result* is obtained."

This was an error, as appears by the testimony of the plaintiff himself, who says (printed record, p. 16, fol. 45), "I don't deny, that the operating the reverse motion from the centre of the boat is *old*, but I do deny that it ever was done with a crank or arm *of that kind*; I mean the arm *h*. The arm *h* in the engines built by Rees have not the flanges *i*."

Here then we see that the real point of invention embodied in this second claim, is the combination of the link *m*, cam rods *f* and *g*, and crank *l* (*all old devices*), with the reversing arm *h*; that is to say, with a reversing arm constructed, with flanges *i*, as described in the specification, and thereby distinguished from the reversing

arms previously used. Only by such construction can this claim be sustained.

The function performed by the combination, that of effecting the reversing of the engine from the centre of the boat, is admitted to be old; as would have been still more clear if evidence of the prior state of the art had been admitted; and it would also have been shown that the combination of the link *m*, cam rods *f* and *g*, and crank *l*, with a reversing arm like that used by defendant, *but not like the arm h* of plaintiff's patent, had been in use long anterior to plaintiff's patent; and that such old combination, as used by defendant, was the very device improved upon by the plaintiff. The scope of the plaintiff's patent is materially affected by the state of the art.

Where a patentee has produced a new *result* by means of a new combination of old devices, he stands in a very different position as to the application of the doctrine of equivalents, from a patentee who produces an *old result* by a new combination of old devices; but in neither case is it a correct statement of the law to say as the Court says in the case, that "the omission of one of the elements, and the substitution of *another mechanical* device to perform the same function will not avoid the infringement."

McCormick vs. Talcott, 20 How. 405.
Singer vs. Walmsley, 1 Fish. 572.

THE FIFTH SPECIFICATION OF ERROR has also relation to the second claim of the patent. The point made by defendant's counsel was, that the second claim was not infringed by the use of a combination of the link *m*, cam rods *f* and *g*, and crank-arm *l*, with a reversing arm *not having flanges i*. This instruction was refused.

The reasons which are given to support the previous specification of error apply also to this. The Court evidently considered that any kind of reversing arm would be an equivalent of the arm *h* of plaintiff's patent.

In the specification the reversing arm *h* is described as being of peculiar construction; which construction forms the basis of the first claim. It is always designated as "the arm *h*," and cannot be understood to mean any other kind or construction of reversing arm. The plaintiff's reversing arm *h* performs two separate functions in the combination in which it is placed, while a reversing arm of ordinary construction (such as used by defendant,) performs only one function. There is nothing in the claim or specification to show that the plaintiff claims in his combination any other than his particularly constructed *arm h*, and his claim is not entitled to any broader interpretation.

It is well known to be the practice of the Patent Office to require the insertion of letters of reference in the claims accompanied with the use of the definite article to refer to a particular part or device referred to in the specification by that letter, and thereby avoiding a repetition of the description. Thus the arm *h* is *not* an arm of any possible construction, but only such an arm as the

specification describes the "arm *b*" to be. This is well stated in the case of *Bliss vs. Haight*, 7 Blatch. 10, 11, 14; and in *McCormick vs. Talcott*, 20 How. 406, the dividing iron M was held to mean a divider of the special construction described.

The patentee was not the inventor of reversing arms, but only of the peculiar improvement in reversing arms described as the arm *b*. He was not the inventor of the link *m*, as he tells us himself, and the other devices, as we have seen, are all old; therefore to quote the words of the Supreme Court:

"As a claim for a combination of mechanical devices it is new and no doubt an improvement, but as a claim for a combination of mechanical devices or parts, it is not infringed by one who uses a part of the combination. Nor can it challenge other improvements of the same machine, *different in form* or combination, as infringements, because they perform the same functions as well or better by calling them equivalents." *McCormick vs. Talcott*, 20 How. 406.

THE SIXTH SPECIFICATION OF ERROR has reference to the third and last claim of the patent, which is as follows: "The use of the connecting rods *e* and *g*, or their equivalents when used in combination with the link *m*, cam-rod *e*, and levers *p* and *r*, as described and for the purposes set forth."

The Court refused, without assigning any reasons, to charge the jury that this 3d claim "is for the combination of the several devices named, or some substantially similar devices, performing substantially the same functions, and that the omission to use any of these devices, *or its equivalent device*, avoids an infringement of the claim."

This point, it seems to me, was stated much more favorably to the plaintiff that his invention would warrant him to demand, but in view of the apparent intention of the Court to give plaintiff the benefit of all equivalents of his devices, on the question of infringement, it was deemed best so to word the point presented to the Court. It was refused, however; so that the Court, in effect, charged the jury that a claim for a combination of devices would be infringed by the combination wanting one of those devices, or any equivalent therefor.

It is hardly necessary to cite authorities on this point, other than those which have been already cited.

The following cases are decisive:

Prouty vs. Ruggles, 16 Pet. 341.
Vance vs. Campbell, 1 Black, 429.
McCormick vs. Talcott, 20 How. 406.
Stimpson vs. Balt. & Sus. R. R. 10 How. 346.

THE SEVENTH SPECIFICATION OF ERROR is to the refusal of the Court to charge, that "a claim for a combination or arrangement of devices for producing a certain result in connection with a steam engine, is not a valid claim as applied to a steam engine having *lifting or puppet valves*, if a like or substantially similar combination or arrangement of devices has been formerly known and used in connection with a steam engine having *sliding valves*, to produce the same result in substantially the same manner, but is a *double use*, and therefore not patentable."

This the Court refused, stating that "there is no proof that it was ever used on a *sliding valve* engine *of a steam boat*."

This statement of the Court is correct, so far as sliding valve engines *of a steam boat* are concerned; but there was evidence to go to the jury of the use of such cam-shifting apparatus, as applied to sliding valve engines, generally (see printed record, page 5, fol. 15), in a book entitled The Engineer and Machinist's Assistant, published in 1847. The book did not show what class of machinery the engines were designed to move—whether a steam boat, a locomotive, or a a saw mill. The error, then, consists in assuming that the plaintiff's device, if old, as applied to engines on a saw mill or locomotive, would be patentable as applied to to a steam boat; and that if old, as applied to a sliding valve engine, it was patentable as applied to a puppet or lifting valve engine.

This is claimed to be error, as such difference constitutes merely a double use, and is not patentable.

In *Bean vs. Smallwood*, 2 Story, 408, Mr. Justice Story, says:

"I take it to be clear that a machine or apparatus, or other mechanical contrivance, in order to give the party a claim to a patent therefor, must in itself be substantially new. If it is old and well known and applied only to a new purpose, that does not make it patentable."

Phillips vs. Page, 24 How. 167.
Bray vs. Hartshorn, 1 Cliff. 541.
Judson vs. Moore, 1 Fish. 556.
Swift vs. Whisen, 1 Fish. 360.
Curtis on Patents, 3d Ed. §§ 49–56.

In this connection it must be borne in mind that the plaintiff in his testimony in relation to his invention says (printed record, page 16, fol. 40): "I would not consider the use of this invention with a *slide valve* engine an infringement of my patent, not if used with a slide valve."

Surely, if such be the limited scope of the patent as construed by the plaintiff himself, his invention amounts merely to the application to a steam engine with lifting valves, of devices before used on engines with sliding valves; and when so used, with the same combination of parts to produce the *same result* in substantially the same manner, it is a mere double use, and as such is not patentable. This is the instruction which the Court was requested, but refused, to give to the jury, and for the reason that no evidence had been given of such prior use on a *steamboat*. Now there is no part of the devices included in any of the claims of the patent which is pecu-

liar to a steamboat, or which does not equally well apply to a steam engine whether on land or water, and there is nothing in the patent claims, which limits their application to use on puppet valve engines, as distinguished from slide valve engines, still less to their application to an engine on a steamboat, as distinguished from an engine to drive a locomotive or a saw-mill.

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